Executive Development Under

Continuing Education Program of IIT Kharagpur

on

A-Z OF MINING RISKS: FROM LAND ACQUISITION MANAGEMENT TO MINING AND MINE CLOSURE MANAGEMENT

(April 06-10, 2020 at Department of Mining Engineering, IIT Kharagpur)

The mining industry is currently on a complex crossroad. The safe and economic extraction of minerals for supplying raw materials to the fluctuating demand market fulfilling the stringent environmental and societal statutory obligations require number of critical risk assessment. Land acquisition for mining purposes, societal interventions at different phase of mining as well as technology management require a holistic risk assessment from life cycle cost analysis to asset management approaches. Thus today's industrial risk management involves safety engineering as well as financial management. Development of advanced technologies like artificial intelligence, machine learning, IoT, virtual and augmented reality have brought new possibilities in industrial risk identification, risk level assessment, mitigation measures and risk financing. This course is aimed at disseminating contemporary risk knowledge to the safety managers of various subsidiaries of Coal India Limited and the safety officers as well as officers managing finance and HR in the mining industry.

It is expected that the participants after attending this programme will be able to

- Discuss the trends of developments in industrial risk management.
- Justify the needs of risk financing.
- Prepare a roadmap for mitigating industrial risks due to human resource planning development and deployment.
- Explain the advanced tools for assessment and mitigation of financial risks.
- Justify the need of Terotechnological approach and ISO 55000 for industrial asset management.

It is expected that there will be national and international experts directly or by distance mode. The method of training will be interactive participation mode supported by distribution of study materials and worksheets. Participants will be given opportunities to present their practical cases for facilitating development of prescriptive solution for their problems. The participants in this course will be made permanent user of MOODLE а (http://www.miningpedagogy.iitkgp.ac.in/moodle/login/index.php), a site dedicated to teaching learning and will be able to use the platform for interacting with experts for resolving issues related to their work for safety management.

We at the Department of Mining Engineering of Indian Institute of Technology, Kharagpur believe in continuous and lifelong learning and we design courses for the engineers in the mining Industry to train them in specific areas. The present course is one of such courses for the practicing engineers. The participants will be encouraged to continue their exposure to the learning environment at the Department of Mining Engineering at IIT Kharagpur for their professional development using various online resources and contacts.

Course fee

The course fee of this <u>non-residential course</u> is **Rs. 30,000.00** per participant. Payment can be made either by the following listed options.

- 1. Payable by demand draft in favor of "CEP-STC, IIT, Kharagpur" payable at Kharagpur
- 2. Electronic money transfer to "CEP STC IIT Kharagpur" to the account number 95562200002955 of Syndicate Bank at Branch SRIC IIT Kharagpur (IFSC Code SYNB0009556). Transaction ID (NEFT/RTGS No. with date) is essential while transferring the course fees through electronic money transfer.

The course fee does not include boarding and lodging charges. <u>IIT Kharagpur is exempted from</u> <u>Income Tax and while sending the course fee no Tax should be deducted</u>. GST @18% will be charged extra as per GoI rules.

Companies sending more than 4 participants will avail the following reduced fee:

- 1. For 5 participants: Rs 1, 45,000.00 (Excluding boarding & lodging).
- 2. More than five participants: Rs. 28,000/- for every additional participant (Excluding boarding & lodging).
- 3. The above course fee does not include GST that will have to be paid additionally by the sponsors as per GOI rule.

Accommodation for the Course Participants

The course will be *Non-Residential*. Accommodation in the campus is considered convenient and can be booked at the **Technology Guest House on payment basis of IIT Kharagpur** on prior request.

Address for Communication

For any other information or sending nomination please write to:

Prof. Khanindra Pathak

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Department of Mining Engineering, IIT Kharagpur

Set up in the year of 1956, this Department has steadily grown as one of the best mining education centre in the country. Besides offering undergraduate, postgraduate, and doctoral courses in Mining Engineering, it is actively involved in short term courses and research activities in the areas of Mining Machinery, Mine Safety and Reliability, Mine Fire and Explosions, Model Studies in Ventilation, Rock Mechanics and Ground Controls, Numerical Analysis of Mine Structures, Underground and Surface Environment, Geometrics and Remote Sensing, Mine Closure Planning and relevant computer applications. Short-term courses, consultancy, sponsored research programmes and postgraduate project works are part of the department's regular activities.